

Solve the following equations for y.

1. $2x + 4y = 16$

$$\begin{array}{r} 2x + 4y = 16 \\ -2x \\ \hline + 4y = 16 \\ -4y \\ \hline + 0y = 16 \end{array}$$

2. $7x - 3y = 15$

$$\begin{array}{r} 4y = -2x + 16 \\ \hline 4y = -2x + 16 \\ -4y \\ \hline 0y = -2x + 16 \end{array}$$

3. $6y = -4x + 30$

$$\textcircled{1} y = -\frac{1}{2}x + 4$$

$$\begin{array}{r} 7x - 3y = 15 \\ -7x \\ \hline - 3y = 15 \\ +3y \\ \hline + 0y = 15 \end{array}$$

$$\begin{array}{r} -3y = -7x + 15 \\ \hline -3y = -7x + 15 \\ +3y \\ \hline 0y = -7x + 15 \end{array}$$

$$\textcircled{2} y = \frac{7}{3}x - 5$$

$$\begin{array}{r} 6y = -4x + 30 \\ \hline 6y = -4x + 30 \\ -6y \\ \hline 0y = -4x + 30 \end{array}$$
$$\textcircled{3} y = -\frac{2}{3}x + 5$$

$$5x + 2y = 7$$

$$8x + y = 9$$

$$\textcircled{1} \begin{array}{r} 8x + y = 9 \\ -8x \quad -8x \end{array}$$

$$y = 9 - 8x$$

$$\textcircled{3} \begin{array}{r} 8x + y = 9 \\ 8(1) + y = 9 \end{array}$$

$$8 + y = 9$$

$$\begin{array}{r} 8 + y = 9 \\ -8 \quad -8 \end{array}$$

$$y = 1$$

$$\textcircled{2} 5x + 2y = 7$$

$$5x + 2(9 - 8x) = 7$$

$$\textcircled{5x} + 18 - \textcircled{16x} = 7$$

$$\begin{array}{r} -11x + 18 = 7 \\ -18 \quad -18 \end{array}$$

$$\begin{array}{r} -11x = -11 \\ \hline -11 \quad -11 \end{array}$$

$$x = 1$$

$$\textcircled{4} \boxed{(1, 1)}$$

$$5x - 3y = 2$$
$$x - 5y = -4$$

$$\textcircled{1} \quad x - 5y = -4$$
$$\quad +5y \quad +5y$$

$$x = 5y - 4$$

$$\textcircled{3} \quad x - 5y = -4$$
$$x - 5(1) = -4$$

$$x - 5 = -4$$
$$\quad +5 \quad +5$$

$$x = 1$$

$$\textcircled{2} \quad 5x - 3y = 2$$

$$5(5y - 4) - 3y = 2$$

$$25y - 20 - 3y = 2$$

$$22y - 20 = 2$$
$$\quad +20 \quad +20$$

$$\frac{22y}{22} = \frac{22}{22}$$

$$y = 1$$

$$4$$

$$(1, 1)$$

$$-1 + 2x = y$$

$$3x = 24 - 6y$$

$$\textcircled{1} y = -1 + 2x$$

$$\textcircled{2} 3x = 24 - 6y$$

$$3x = 24 - 6(-1 + 2x)$$

$$3x = \boxed{24 + 6} - 12x$$

$$3x = 30 - 12x$$
$$+12x \quad +12x$$

Hi!
wyd
Today

$$\frac{15x}{15} = \frac{30}{15} \quad \textcircled{x=2}$$

$$\textcircled{3} y = -1 + 2x$$

$$y = -1 + 2(2)$$

$$y = -1 + 4$$

$$\textcircled{y=3}$$

$$\textcircled{4} \boxed{(2, 3)}$$

Check

$$-1 + 2x = y$$